IN THE CLAIMS

The following listing of claims replaces are prior versions and listings of claims.

1. (Currently Amended) A system for partitioning and loading data in a low-powered communication device, the system comprising:

a general computing subsystem;

a modem computing subsystem in communication with the general computing subsystem;

a shared memory module for receiving a binary data, wherein the shared memory module is accessed by the general computing subsystem and the modem computing subsystem independently;

a first clock operable to provide the general computing ~~system~~ subsystem access to the shared memory module;

a second clock operable to be selectively activated by the general computing subsystem to the shared memory module to permit use of the shared memory module by the modem computing subsystem; and

a clock and power control unit disposed in the modem computing subsystem and operable to gate clocking within the modem computing subsystem and to the shared memory module when modem functionality is not enabled.

2. (Original) The system of claim 1 wherein the modem computing subsystem controls data processing in accordance with wireless communication protocols.

3. (Original) The system of claim 2 wherein the modem computing subsystem further comprises a mobile station wireless modem.

4. (Original) The system of claim 1 wherein the general computing subsystem further comprises a nonvolatile memory that stores information for generating the data.

5. (Original) The system of claim 4 wherein the general computing subsystem loads the data into the shared memory module.

6. (Original) The system of claim 4 wherein the general computing subsystem generates the data from compressed information stored in the nonvolatile memory.

7. (Previously Presented) A portable wireless communication device, the device comprising:

a nonvolatile memory;

a general computing subsystem having access to the nonvolatile memory;

a modem computing subsystem selectively enabled and disabled by the general computing subsystem;

a first shared memory module independently accessible by the general computing subsystem and the modem computing subsystem, the first shared memory module being selectively enabled and disabled by the general computing subsystem;

a first binary image that is loaded in the first shared memory module from the nonvolatile memory by the general computing subsystem when selectively enabled, and is accessible by the modem computing system to configure the modem computing subsystem; and

a clock and power control unit in the modem computing subsystem and operable to gate clocking within the modem computing subsystem and to the shared memory module when modem functionality is not enabled.

8. (Previously Presented) The device of claim 7 wherein the first binary memory image comprises mobile station modem code sufficient to permit the modem computing subsystem to establish a wireless communication link and monitor a paging channel.

9. (Previously Presented) The device of claim 8, wherein the modem computing subsystem and the first shared memory module are enabled when the computing subsystem starts to monitor the paging channel, and the modem computing subsystem and the first shared memory module are disabled when not engaged in wireless communication.

10. (Previously Presented) The device of claim 8, further comprising a second shared memory module, wherein the second shared memory module is independently accessible by the general computing subsystem and the modem computing subsystem, wherein the second shared memory module can be disabled by the general computing subsystem to save power, and wherein a second binary memory image is loaded in the second shared memory module from the nonvolatile memory by the general computing subsystem.

11. (Previously Presented) device of claim 10, wherein the second binary memory image contains the mobile station modem code sufficient to operate a traffic channel.

12. (Previously Presented) The device of claim 11, wherein the second shared memory module is activated when the modem computing subsystem operates a traffic channel, and the second memory module is deactivated to save power when ceasing to operate the traffic channel.

13-20. (Canceled)

21. (Previously Presented) The system of claim 1 wherein the general computing system further comprises a general system processor and a power management unit, wherein the power management unit provides clocking to the general computing subsystem processor and the shared memory module.

22. (Previously Presented) The system of claim 21 wherein the modem computing subsystem further comprises a modem subsystem processor, and wherein the clock and power control unit is further operable to gate clocking to the modem subsystem processor and to the shared memory module when modem functionality is not enabled.

23. (Previously Presented) The system of claim 1 wherein the shared memory module further comprises at least one arbitration block operable to receive unrelated clock signals from the general computing subsystem and the modem computing subsystem.

24. (Previously Presented) The system of claim 23 wherein the shared memory module further comprises at least one Dynamic Random Access Memory (DRAM), each DRAM corresponding to an arbitration block, wherein the DRAM is operable to conserve power when the memory is not clocked.

25. (Previously Presented) The device of claim 7 wherein the general computing system further comprises a general system processor and a power management unit, wherein the power management unit provides clocking to the general computing subsystem processor and the shared memory module.

26. (Previously Presented) The device of claim 25 wherein the modem computing subsystem further comprises a modem subsystem processor, and wherein the clock and power control unit is further operable to gate clocking to the modem subsystem processor and to the shared memory module when modem functionality is not enabled.

27. (Previously Presented) The device of claim 10 wherein the first and second shared memory modules further each comprise at least one arbitration block operable to receive unrelated clock signals from the general computing subsystem and the modem computing subsystem.

28. (Previously Presented) The device of claim 27 wherein the first and second shared memory modules further each comprise at least one Dynamic Random Access Memory (DRAM), each DRAM corresponding to an arbitration block, wherein the DRAM is operable to conserve power when the memory is not clocked.

29. (New) A system for partitioning and loading data in a communication device, the system comprising:

means for general computing;

means for modem computing in communication with the means for general computing;

means for receiving a binary data, wherein the means for receiving the binary data is accessed by the means for general computing and the means for modem computing independently;

means for providing the means for general computing with access to the means for receiving the binary data;

means for permitting use of the means for receiving the binary data by the means for modem computing, wherein the means for permitting use is selectively activated by the means for general computing; and

means for gating clocking within the means for modem computing and to the means for receiving the binary data when modem functionality is not enabled.

30. (New) A method for partitioning and loading data in a communication device, comprising:

receiving a binary data;

independently accessing the binary data by a general computing subsystem and a modem computing subsystem, wherein the modem computing subsystem is in communication with the general computing subsystem;

providing the general computing subsystem with access to the binary data according to a first clock;

selectively activating a second clock by the general computing subsystem to permit use of the binary data by the modem computing subsystem; and

gating clocking within the modem computing subsystem and to the binary data when modem functionality is not enabled.

31. (New) The method of claim 30, further comprising controlling data processing in accordance with wireless communication protocols.

32. (New) The method of claim 31, wherein the modem computing subsystem further comprises a mobile station wireless modem.

33. (New) The method of claim 30, wherein the general computing subsystem further comprises a nonvolatile memory that stores information for generating the data.

34. (New) The method of claim 33, further comprising loading the binary data into the shared memory module.

35. (New) The method of claim 33, further comprising generating the binary data from compressed information stored in the nonvolatile memory.

36. (New) The method of claim 30, wherein the general computing system further comprises a general system processor and a power management unit, further comprising providing clocking to the general computing subsystem processor and the shared memory module.

37. (New) The method of claim 36, wherein the modem computing subsystem further comprises a modem subsystem processor, and wherein gating clocking further comprises gating clocking to the modem subsystem processor and to the shared memory module when modem functionality is not enabled.

38. (New) The method of claim 30, further comprising receiving unrelated clock signals, by at least one arbitration block of the shared memory module, from the general computing subsystem and the modem computing subsystem.

39. (New) The method of claim 38, further comprising conserving power by a respective Dynamic Random Access Memory (DRAM) corresponding to an arbitration block when the memory is not clocked.

40. (New) A portable wireless communication device, comprising:

means for nonvolatile storage of a first binary image

means for general computing having access to the means for nonvolatile storage;

means for modem computing selectively enabled and disabled by the means for general computing;

means for shared storage independently accessible by the means for general computing and the means for modem computing, the means for shared storage being selectively enabled and disabled by the means for general computing;

wherein the means for general computing is further operable for loading the first binary image in the means for shared storage from the means for nonvolatile storage when selectively enabled, wherein the first binary image in the means for shared storage is accessible by the means for modem computing to configure the means for modem computing; and

wherein the means for modem computing further comprises means for gating clocking within the means for modem computing subsystem and to the means for shared storage when modem functionality is not enabled.

41. (New) A method for partitioning and loading data in a communication device, comprising:

independently accessing a first shared memory module by a general computing subsystem and a modem computing subsystem, wherein the first shared memory module and the modem computing subsystem are selectively enabled and disabled by the general computing subsystem;

loading a first binary image in the first shared memory module from a nonvolatile memory by the general computing subsystem when selectively enabled, wherein the first binary image is accessible by the modem computing system to configure the modem computing subsystem; and

gating clocking within the modem computing subsystem and to the shared memory module when modem functionality is not enabled.

42. (New) The method of claim 41, further comprising establishing a wireless communication link and monitoring a paging channel by modem computing subsystem in accordance with mobile station modem code included with the first binary memory image.

43. (New) The method of claim 42, further comprising enabling the modem computing subsystem and the first shared memory module when the computing subsystem starts to monitor the paging channel, and disabling the modem computing subsystem and the first shared memory module when not engaged in wireless communication.

44. (New) The method of claim 42, further comprising:

independently accessing a second shared memory module by the general computing subsystem and the modem computing subsystem;

disabling the second shared memory module by the general computing subsystem to save power; and

loading a second binary memory image in the second shared memory module from the nonvolatile memory by the general computing subsystem.

45. (New) The method of claim 44, further comprising operating a traffic channel according to mobile station modem code included in the second binary memory image.

46. (New) The method of claim 45, further comprising activating the second shared memory module when the modem computing subsystem operates the traffic channel, and deactivating the second memory module to save power when ceasing to operate the traffic channel.

47. (New) The method of claim 41, further comprising providing clocking to a general computing subsystem processor and the shared memory module by a power management unit, wherein the general computing system further comprises the general system processor and the power management unit.

48. (New) The method of claim 47, further comprising gating the clocking to a modem subsystem processor and to the shared memory module when modem functionality is not enabled, wherein the modem computing subsystem further comprises the modem subsystem processor.

49. (New) The method of claim 44, further comprising receiving unrelated clock signals, by at least one arbitration block included with each of the first and second shared memory modules, from the general computing subsystem and the modem computing subsystem.

50. (New) The method of claim 49, further comprising conserving power by at least one Dynamic Random Access Memory (DRAM) corresponding to an arbitration block when the memory is not clocked.